

Appl. No. 09/581,594

1. (Twice Amended) A process for preparing detergent particles, comprising the steps of:

(I): mixing a base particle for supporting a surfactant ((a) component); and 15 to 100 parts by weight of a surfactant composition ((b) component), based on 100 parts by weight of said (a) component, the base particle having an average particle size of from 150 to 500 μm , a bulk density of 400 g/L or more, and a particle strength of 50 kg/cm² or more, under mixing conditions such that said (a) component does not substantially undergo breakdown, to give a mixture; wherein said base particle is obtained by spray-drying an aqueous slurry, wherein a mixing operation is carried out by using a mixer comprising agitation impellers of which mixing impellers have a shape of a paddle; wherein the agitation impellers have a Froude number of from 0.5 to 4, provided where the mixer further comprises disintegration impellers, the mixing operation is carried out under mixing conditions so as not to substantially rotate the disintegration impellers, and

(II): mixing the mixture obtained in step (I) with 5 to 100 parts by weight of fine powder, based on 100 parts by weight of the mixture, with substantially maintaining the shape of (a) component containing (b) component, to give detergent particles, wherein the detergent particles have a degree of particle growth of 1.3 or less, and a bulk density of 500 g/L or more.

App1. No. 09/581,594

3. (Twice Amended) A process for preparing detergent particles, comprising the steps of:

C02 (I): mixing a base particle for supporting a surfactant ((a) component); and 15 to 100 parts by weight of a surfactant composition ((b) component), based on 100 parts by weight of said (a) component, the base particle having an average particle size of from 150 to 500 μm , a bulk density of 400 g/L or more, and a particle strength of 50 kg/cm² or more, under mixing conditions such that said (a) component does not substantially undergo breakdown, to give a mixture; wherein said base particle is obtained by spray-drying an aqueous slurry, wherein a mixing operation is carried out by using a mixer comprising agitation impellers of which mixing impellers have a shape of a screw, under mixing conditions wherein the agitation impellers have a Froude number of from 0.1 to 4, and

(II): mixing the mixture obtained in step (I) with 5 to 100 parts by weight of fine powder, based on 100 parts by weight of the mixture, with substantially maintaining the shape of (a) component containing (b) component, to give detergent particles, wherein the detergent particles have a degree of particle growth of 1.3 or less, and a bulk density of 500 g/L or more.

App1. No. 09/581,594

4. (Twice Amended) A process for preparing detergent particles, comprising the steps of:

(I): mixing a base particle for supporting a surfactant ((a) component); and 15 to 100 parts by weight of a surfactant composition ((b) component), based on 100 parts by weight of said (a) component, the base particle having an average particle size of from 150 to 500 μm , a bulk density of 400 g/L or more, and a particle strength of 50 kg/cm² or more, under mixing conditions such that said (a) component does not substantially undergo breakdown, to give a mixture; wherein said base particle is obtained by spray-drying an aqueous slurry, wherein a mixing operation is carried out by using a mixer comprising agitation impellers of which mixing impellers have a shape of a ribbon, under mixing conditions wherein the agitation impellers have a Froude number of from 0.05 to 4, and

(II): mixing the mixture obtained in step (I) with 5 to 100 parts by weight of fine powder, based on 100 parts by weight of the mixture, with substantially maintaining the shape of (a) component containing (b) component, to give detergent particles, wherein the detergent particles have a degree of particle growth of 1.3 or less, and a bulk density of 500 g/L or more.